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Health Mobilization Series

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Community EMERGENCY HEALTH PREPAREDNESS

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service

Community EMERGENCY HEALTH PREPAREDNESS

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
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INTRODUCTION

Life-taking, property-destroying disasters occur somewhere every day. Following the more extensive of these, it often becomes apparent that disaster problems could have been dealt with much more successfully if certain preparations had been made in advance. Consequently, communities that have been visited by disaster often do, when the event is past, make preparations against the day that disaster strikes again.

If preparations to meet these more common misfortunes are desirable, then even more desirable, and necessary, are preparations to meet that enormous calamity, nuclear war—the threat of which is ever with us. A nuclear war would result in unprecedented destruction and loss of life in many parts of the Nation, all within a few hours or days. Survival would be our predominant concern for an indefinite time. The demand for the kinds of manpower, supplies, equipment, and facilities that are vital to survival would be extremely great, while at the same time the amounts available would be severely reduced.

Preparations for dealing with the immediate consequences of nuclear attack are generally described as civil defense preparations. These consist of actions to ensure that the greatest possible amounts of essential resources will be available after a nuclear attack, and that these resources will be used as effectively as possible—first, to further the survival of our people and government, and, ultimately, to help us return to a semblance of our pre-disaster way of life. While directed primarily toward a nuclear war disaster, which may never come, civil defense preparations also yield a more immediate benefit by increasing readiness to deal with the lesser calamities which can occur anywhere at any time.



A. IMPORTANCE OF THE COMMUNITY

Civil defense preparations are necessary at Federal, State, and community levels, but it is the community that must deal directly with the disaster. It is there that the survival and recovery of the Nation will be initially determined. "Community," as used here, refers to the smallest political subdivision, or combination of subdivisions, within a State which plans and organizes separately for civil defense. It should be of sufficient area and should contain enough population and other resources to justify separate organizing. Most often it will be a county, a city, or a combination city-county. It may even be a multi-county unit, when the counties are small and sparsely populated.

This booklet deals primarily with one particular aspect of community preparedness: preparing to provide the medical care and public health services which probably will be needed following a major disaster. These will be referred to here as emergency health services. While these health services are very important they are only one of the essential community disaster services. Some of the other services are: fire, rescue, public works, police, welfare, radiological defense, communications, transportation, supply, and manpower. Health disaster planners, therefore, should gain some understanding of the total community civil defense program before developing their health program.

B. BASIS OF COMMUNITY CIVIL DEFENSE

Greatest efficiency in the use of community resources can be achieved by applying them to disaster problems in a unified, organized way, under a central controlling and coordinating authority. This authority, by law and tradition, is local government. Local government has the existing administrative machinery upon which to base the emergency organization and it normally provides services which are highly necessary in disaster. Around it can be mobilized all the community's vital resources and through it they can be applied to disaster problems in a concerted manner.

To enable local government to provide the kinds of services that will be needed in an emergency, its peacetime organization is modified. Some of its normal services are expanded, some curtailed, and others suspended, while new kinds of services to meet the unique requirements of a major disaster are provided for.

The peacetime head of local government—the city manager, mayor, or chairman of county commissioners—usually serves also as head of the emergency government. The peacetime heads of major departments or agencies of local government become the heads of those disaster organiza-

tional units responsible for providing the services most closely related to their peacetime responsibilities.

Nongovernmental volunteers are assigned to augment governmental personnel. For certain special services for which there are no corresponding peacetime governmental activities, new organizational components of government are created.

If the civil defense "community" is comprised of several political jurisdictions, the governments of those jurisdictions may plan to merge in disaster, with that of the largest jurisdiction providing the predominant leadership.

Because local governments have primary responsibility for the provision of essential services in disaster, they also have primary responsibility for seeing to the carrying out of the predisaster preparations.

C. CIVIL DEFENSE PLANS

It would be imprudent to wait until disaster comes to develop and define an emergency organization and to decide upon a possible course of action. Therefore, a community that is preparing thoroughly for disaster writes a civil defense plan which describes the emergency governmental organization for the community and the manner in which the organization will function. For each essential disaster service there is prepared a separate section, or annex, of the plan which describes in detail the manner of organizing and the specific operating procedures for that service. The health annex of the civil defense plan, consequently, describes the organization for providing emergency health services and the manner in which community health resources will be used in disaster.

D. BASIS OF THE EMERGENCY HEALTH SERVICE

When the community has an official public health agency, that agency serves as the basis for the emergency health service component of the emergency government organization. When the head of the public health agency is a physician, he usually becomes chief of the emergency health service. When there is no public health agency in the community, the emergency health service organization must be created as a new part of government and staffed largely with nongovernmental personnel. If there is no public health agency, or if such an agency is headed by a nonphysician, some respected local physician who has leadership ability and an interest in disaster preparedness should be appointed as emergency health chief.

E. LEADERSHIP FOR HEALTH PREPAREDNESS

The physician who has been designated as head of the emergency health organization has primary responsibility for initiating and carrying out the emergency health preparedness program. He must, however, be actively assisted by other community health leaders.

One effective means for inaugurating a community health preparedness program is through creation of an emergency health advisory committee. Such a committee should be comprised of representatives of all important health occupations, organizations, and facilities in the community. Where there are local professional associations and societies, such as a medical society, dental society, nurses' association, hospital association, sanitary engineering association, etc., these organizations should be represented on the committee. Where a particular health occupation has no local association or society, a leading member of that occupation should, nonetheless, be appointed to the committee. Also on the committee should be representatives of the local health department, Red Cross chapter, local schools of medicine and related professions, medical facilities of local military bases, and other health-related facilities. The designated emergency health chief should serve as chairman.

The advisory committee can provide the leadership and the professional and technical guidance and assistance needed for the health preparedness program. Subcommittees may be formed as necessary to deal with specialized problems such as supply, hospitals, manpower, training, communications, and finance.

FIRST PHASE OF PREPAREDNESS: PLANNING AND ORGANIZING

Community emergency health preparations can be thought of as occurring in two distinct phases. The first of these involves primarily planning and organizing.

A. PLANNING PROCEDURE

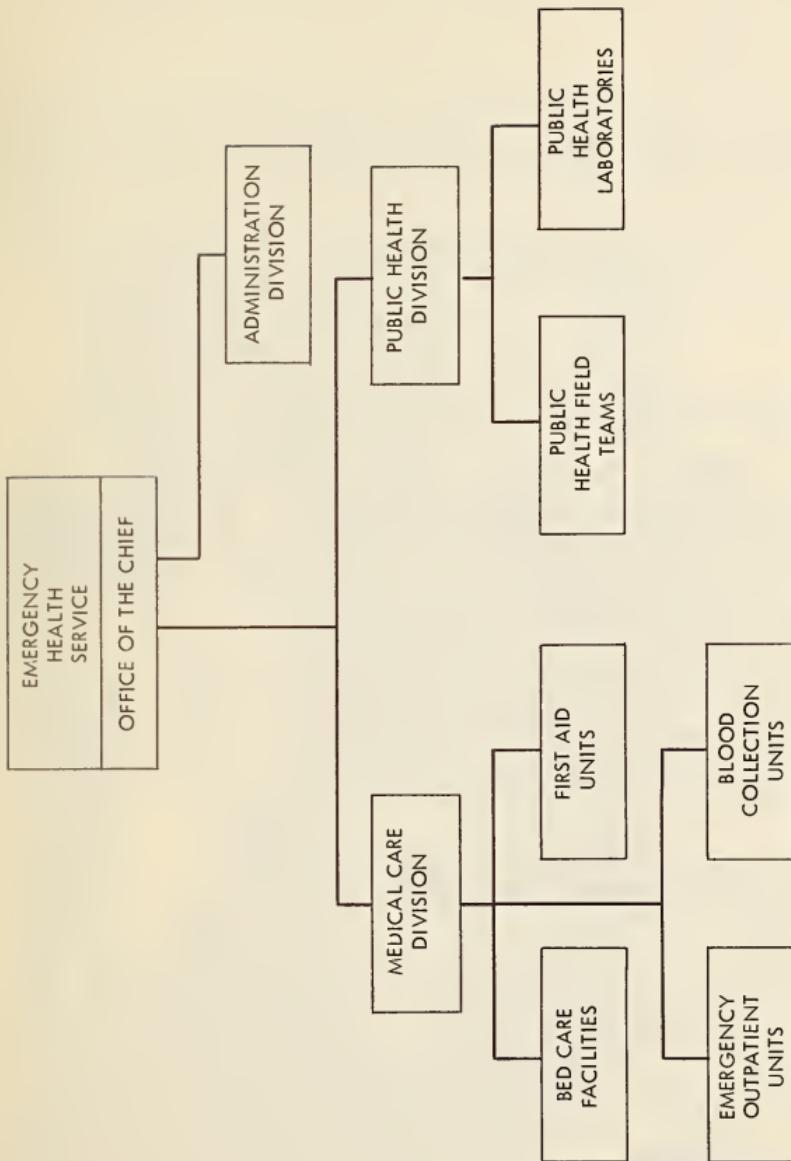
As its first order of business, the advisory committee should design the emergency health organization and write the emergency health plan (or bring up-to-date the present organization and plan). In accomplishing this, the committee might proceed in the following manner:

1. Familiarize itself with the present civil defense plans and planning methods for the State and community.
2. Consider three or four of the most probable situations that may occur in the community as a result of a nuclear attack on the Nation.
3. Determine, for each of these situations, the kinds and amounts of emergency health services that are most likely to be required. (See page 8.)
4. Estimate, for each situation, the community's requirements for certain key health resources which can serve as indicators of overall capability. (Key resources could include, for example: physicians, nurses, hospital beds, laboratories, broad-spectrum antibiotics, and blood collecting and dispensing sets.)
5. Determine the approximate amounts of these key health resources normally on hand in the community.
6. Compare 4 with 5 above; decide what is the worst potential disaster situation that would be manageable in terms of present health resources; and adopt that situation as the planning basis.

7. Design an organization for efficient provision of the emergency health services needed in the assumed situation. (See section "B" below.)
8. Assign individuals to leadership positions in the proposed emergency health organization, considering such factors as training and experience, leadership ability, and interest in disaster preparedness. (Advisory committee members will usually be among those assigned.)
9. Determine the general procedures for providing emergency health services in the assumed situation, with alternatives when feasible, for other situations.
10. Adopt a format for the written plan. (See page 8.)
11. Write the plan, assigning responsibility for the writing of each part to the committee members or others who have leadership responsibilities for the activities to be described in that part.
12. Ensure that the plan provides descriptions of functions and operating procedures in enough detail so that individuals and facilities that are to be guided by the plan will be able to act in disaster with a minimum of hesitation or confusion.
13. Render all parts of the plan consistent with one another, and prepare a review draft.
14. Obtain concurrences and approvals from community and State health and civil defense leaders, as appropriate.
15. Print and distribute the final version of the plan so that all potential emergency health participants and other interested parties can have access to copies.

B. THE EMERGENCY HEALTH ORGANIZATION

There are a variety of ways in which a community's health resources can be organized for disaster, but whatever the form of the organization, it will have the basic mission of providing effective medical care and public health services, utilizing all available health resources. This organization must also be able to perform the administrative functions necessary to meet the additional resources needs of health operating units. Under the emergency health service chief, then, are the organizational subunits necessary for



Basic Organization: Community Emergency Health Service

achieving these ends. Each of these subunits is headed by a leader who is directly answerable to the chief. These leaders and the emergency health service chief are located at a headquarters, often called a control center, from which they can control and coordinate the operation of all medical care and public health units which already exist in the community or which are established in disaster.

The size and refinement of the organization will vary according to the community's resources and its assumed postattack situation. Communities within a given State usually follow a similar pattern in designing their emergency health organizations. Often the State has prepared and can provide each community with a model emergency health plan which describes a recommended emergency health organization. The chart on page 7 represents graphically a basic organizing pattern which is similar to that employed by many communities. In larger communities, the three divisions shown are often further divided into specialized subunits.

C. PLAN FORMAT

Like the organization, the community emergency health service written plan often follows a pattern established by the State. The pattern employed is much the same from State to State. Typically, there is a basic or introductory section which delineates the overall emergency health organization and describes the general manner in which health services will be provided. This section is followed by a series of attachments, or appendixes, which describe in detail the major components of the emergency health organization, their functions and staffing, and specific operating procedures. Emergency health planners can be guided by the model community emergency health plan provided by some States or by a good plan prepared by another community in the State.

D. EMERGENCY HEALTH SERVICES

The specific services to be provided for in the emergency health plan will vary somewhat from community to community, depending on the community's size, the amounts and kinds of health resources normally on hand, and the most probable postattack situations predicted for that community. Every community, however, will provide some or all of the following services:

1. Medical Care

This involves operation of:

- a. General hospitals and other existing facilities capable of providing general medical and surgical bed care in disaster.

b. Civil Defense Emergency Hospitals.*

c. Nursing and convalescent homes and other facilities such as motels and hotels which can provide, or which can be adapted to provide, beds for minimal nursing care.

*The Civil Defense Emergency Hospital (CDEH) is a unit of supplies and equipment which is owned by the Federal Government, loaned to the State, and located in the community for use in treating the seriously sick and injured following a major disaster. It can be set up in an existing building in disaster as an austere, but complete, functional hospital. When staffed, it can enable the provision of essential medical and surgical care for 200 bed-patients at one time.



- d. First aid stations and first aid teams to provide emergency care for casualties at or near the disaster scene.
- e. Emergency outpatient facilities, existing or improvised, to help care for those sick and injured whose conditions do not justify bed care.
- f. Medical care units in public fallout shelters to meet minimum needs of the shelter population during shelter occupancy.
- g. Units to collect, store, and distribute whole blood in addition to the blood collected by hospitals and related facilities.
- h. Clinical laboratories outside of hospitals which can augment hospital laboratories.

2. Emergency Public Health

This involves operation of:

- a. Public health field teams to:
 - (1) Examine food and water supplies for contaminants and initiate appropriate corrective measures.
 - (2) Inspect public sewerage and waste disposal systems for conformance to minimum sanitation standards and arrange for and guide corrections as required.
 - (3) Inspect public housing and food serving and food processing establishments to ensure conformance with disaster sanitation standards.
 - (4) Survey populated areas for the presence of disease vectors, identify vectors, and arrange for and oversee control measures.
 - (5) Provide guidance in the sanitary disposal of the dead.
 - (6) Investigate epidemics, including those caused by biological warfare agents, and arrange for and guide epidemic control measures.
- b. Public health laboratories, to perform necessary laboratory support for environmental health and communicable disease control activities. (These laboratories will include existing public health laboratories and other kinds of existing laboratories adapted to perform public health functions.)

3. Mortuary Services

In some States it is customary for a community emergency health service to be given responsibility also for the provision of mortuary services. In such cases the emergency health organization includes an organizational subunit which has total mortuary responsibility and the health plan describes the procedures for collecting, identifying, and disposing of the dead.

In most States, however, mortuary services are the responsibility of a separate mortuary service unit of the civil defense organization, which is described in a separate mortuary service annex. When the health service and mortuary service are separate there must, of course, be coordination between them in disaster to ensure that sanitation standards are maintained in the disposal of bodies.

SECOND PHASE OF PREPAREDNESS: IMPLEMENTING PROGRAMS

Preparing the written emergency health plan and defining the emergency health organization constitute the first phase of preparedness. These actions, however, represent only a limited increase in the community's disaster capability unless they are followed by certain long-term endeavors, or implementing programs, which make possible the truly effective carrying out of emergency health operations. Like planning and organizing, these programs can best be accomplished under the initiative and guidance of the emergency health advisory committee. The cooperation and assistance of a majority of the community's health and medical people, as well as many other of the community's citizens, is essential. Implementing programs include the following:

A. MEETING MANPOWER NEEDS

1. In terms of the activities provided for in the emergency health plan, estimate the total requirements for all categories of essential health manpower and nonhealth supporting manpower needed to operate hospitals and other health units.
2. Recruit, register, and assign to emergency health facilities and other emergency health activities the health and supporting manpower which is available in the community, in numbers approaching as closely as possible to planned disaster staffing. (Obtain necessary assistance from emergency manpower resource officials.)
3. Train all emergency health service assignees to perform their emergency functions most effectively.
4. Establish, in cooperation with emergency manpower resource officials, procedures to acquire additional manpower for emergency health activities in time of disaster. (They will augment those who report as a result of pre-disaster assignments.)

5. Help train the general public through Medical Self-Help,* Red Cross first aid, Red Cross home nursing, and similar courses so that individuals and families can better meet their own health needs in disaster. This will lessen the potential demand for organized health services.

B. MEETING FACILITY NEEDS

1. In terms of the emergency health plan, estimate the disaster requirement for medical care and public health facilities.
2. Prepare to obtain maximum effectiveness from existing health facilities by:
 - a. Developing hospital disaster plans which are consistent with the community emergency health plan and which provide for maximum expansion of bed space and essential hospital services.
 - b. Arranging to use, in addition to general medical and surgical hospitals, other institutions such as mental hospitals, specialty hospitals, and chronic disease hospitals for the provision of medical and surgical bed care in disaster.
 - c. Arranging for expansion of bed space by nursing and convalescent homes to accommodate disaster bed patients who do not require intensive care.
 - d. Arranging for expanded operation of clinical and public health laboratories.
 - e. Arranging to use nonhospital clinics and dispensaries as first-aid stations or emergency outpatient units.
 - f. Arranging for expanded operation of all community blood collecting and storing facilities, both within and outside of hospitals.

*The Medical Self-Help Training Course is a course developed by the U.S. Public Health Service and the Office of Civil Defense, in cooperation with the American Medical Association, to render the public better able to meet its own needs when professional medical care is not available. Lessons cover procedures for first aid, home nursing, protection from radioactive fallout, emergency environmental sanitation, infant and child care, and childbirth in emergencies. Medical Self-Help instruction kits are available through State health departments.

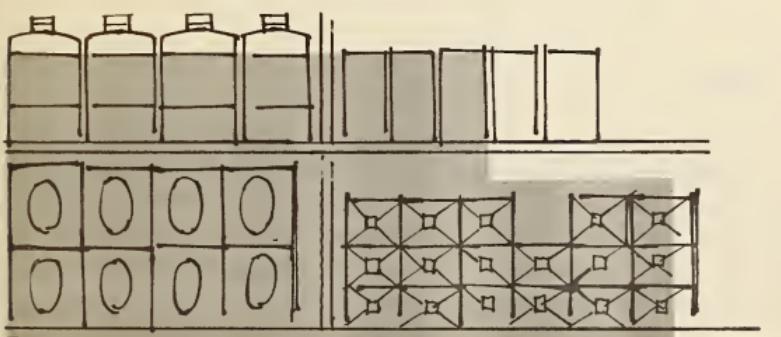
3. Prepare to adapt nonhealth facilities to emergency health use by:
 - a. Arranging for existing hospitals to use neighboring buildings to provide expanded bed space.
 - b. Arranging to use certain existing nonhealth buildings as the operating sites for Civil Defense Emergency Hospitals, first-aid stations, and emergency outpatient units.
 - c. Arranging to use facilities like motels and hotels for provision of minimal bed care.
 - d. Arranging for the establishment of medical care units in the larger public fallout shelters.
 - e. Arranging to use, if necessary, nonhealth laboratory facilities such as academic and industrial laboratories in the performance of public health and clinical laboratory emergency functions.

C. MEETING MATERIEL NEEDS

1. Estimate, in terms of the emergency health plan, disaster requirements for essential health materiel, assuming the most economical use possible and the employment of substitute items when feasible.
2. Inventory all significant supplies of essential health items in the community to determine average holdings, not including any stocks which are reserved for State or Federal control in disaster.
3. Estimate the quantities of these likely to be available and usable postattack.



4. Compare amounts expected to be available with estimated requirements in order to determine probable shortages.
5. Acquire additional stocks of essential health materiel, having as a goal a sufficient supply of each class of items to permit at least 30 days of full-scale disaster operations without assistance from outside the community.
 - a. Individual health facilities may, at their own expense, increase current inventories and acquire certain additional items intended especially for disaster use.
 - b. Civil defense officials may obtain financial or other assistance for health facilities for the acquisition of emergency supplies and equipment.
 - c. Civil defense officials may also acquire and store in the community supplies for special emergency health purposes, such as for establishing first-aid stations.
6. Establish, in cooperation with emergency supply resource officials, procedures for the acquisition and distribution in disaster of essential health materiel not already in the hands of hospitals and other using facilities. (This would include materiel already located at supply points in the community as well as materiel which might be sent in from other areas.)
7. Estimate disaster requirements for certain items of supply and equipment which are not exclusively usable for medical care or public health purposes, but which are nonetheless integral to the successful operation of emergency health units. These would include emergency generators, two-way radios, radiological monitoring instruments, etc.
8. Arrange with appropriate civil defense officials for special procurement and storage in or near health facilities of these nonhealth items; or, when items of this kind are already located in the community, arrange for pre-designation of some of them for disaster use by health units.



D. MEETING SUPPORTING RESOURCES NEEDS

The success of emergency health operations depends not only on resources which are usable exclusively for medical care and public health purposes, but also on numerous services (and the supplies, equipment, and skills associated with them) which are not involved directly in the performance of health services. An abundance of purely health resources will be of little avail unless arrangements also have been made for the communications, transportation, traffic control, utility maintenance, feeding service, laundry service, etc., needed to support health activities. The greater part of emergency health support requirements must be met postdisaster through other components of the civil defense organization which specialize in these various kinds of support. An important part of emergency health preparedness consists of making arrangements to assure that sufficient support is available when needed. These arrangements include the following:

1. Estimate the total support requirements for all planned emergency health activities. (These requirements should be in terms of the barest minimum, since it is assumed that supporting resources will be scarce and that they also will be needed by many civil defense activities other than health.)
2. Determine the amount of support that health facilities and units can provide for themselves by using resources currently in their possession or committed to their control in disaster.
3. Inform the officials of appropriate civil defense units, or other community agencies with support responsibilities, of the health support requirements which must be met with their assistance.
4. Establish with the above officials procedures for providing the needed support in disaster.

E. TESTING

Testing involves the simulation of disaster conditions in order to bring into operation part or all of an emergency plan. Testing is the best means, short of an actual disaster, for determining the current state of preparedness. Experience gained through testing provides a basis for improving and updating the plan. Also, individuals who participate in a test can

become familiar with their disaster duties in a situation resembling a disaster situation.

At regular intervals emergency health leaders should accomplish some or all of the following:

1. Test single elements of preparedness, such as a personnel alerting procedure, a procedure for taking shelter from fallout, or operation of a standby generator, either separately or concurrently.
2. Test the entire disaster plan of a hospital or other health facility, with the participation of a substantial part of the planned disaster staff, and perform or simulate the performance of as many disaster functions as possible.
3. Activate the emergency health headquarters staff and place into simulated disaster operation several emergency health operating units—hospitals, first-aid stations, blood collecting centers, etc. This is often done as part of a community-wide exercise in which other components of the community civil defense organization participate.

PREPAREDNESS: A CONTINUING RESPONSIBILITY

It can readily be seen that community emergency health preparedness cannot be accomplished overnight. While much may be achieved in only a few weeks, the attainment of the highest ability to use health resources effectively following nuclear attack requires months and even years of sustained effort.

While progress is being made toward the goals of preparedness, the effects of the passage of time serve to offset some of this progress. Thus, a perfect state of preparedness is never attained and whatever degree of preparedness is achieved is maintained only by continuing effort. Nevertheless, as long as the threat of war exists, these civil defense preparations, like military preparations, are an essential part of national and community life. The time and effort of members of the health occupations, civil defense leaders, and other influential members of the community are essential for a successful emergency health preparedness program.



WHERE TO GET HELP

Several kinds of outside assistance are available to a community which is attempting to improve its emergency health capability.

A. STATE ASSISTANCE

The best sources of this assistance are usually those State agencies with emergency health responsibilities, especially the State Health Department and the State Civil Defense Office. Such State agencies may:

1. Send personnel to assist in the development of community emergency health plans and other preparedness programs.
2. Conduct disaster training courses at the State level for community health and medical personnel.
3. Provide consultation, training materials, and instructors for the conduct of emergency health training in the community.
4. Furnish guidance publications dealing with community emergency health preparedness.
5. Provide direct financial assistance for health preparedness training or stockpiling.
6. Arrange for Federal financial assistance.
7. Arrange for storage in the community of Federally- or State-owned civil defense medical stockpile materials.
8. Assist the community in the acquisition of Federal surplus property items for emergency health activities.

B. FEDERAL ASSISTANCE

Federal assistance in community emergency health preparedness is provided by several Federal agencies, particularly the Public Health Service in the U.S. Department of Health, Education, and Welfare, the Office of Civil Defense in the Department of Defense, and the Office of Emergency Planning in the Executive Office of the President. Such assistance is provided through appropriate State agencies, most often the State Health Department and the State Civil Defense Office. This assistance includes:

1. Guidance publications and training materials.
2. Financial contributions, or "matching funds," whereby the Federal Government pays up to one-half of the cost of certain kinds of emergency supplies and equipment, training courses, and other preparedness activities, while the State pays the rest.
3. Federal surplus property which can be used for emergency health purposes and which is available to communities at little or no cost.
4. Emergency health courses conducted by Federal agencies for State and community health and medical leaders.
5. Federal personnel who work directly with State and community personnel in developing community emergency health preparedness programs.
6. Civil Defense Emergency Hospitals which are stored in strategically located communities to improve local disaster medical care capability.

C. OTHER ASSISTANCE

In addition, many nongovernmental national health organizations, such as the American Medical Association, American Hospital Association, American Dental Association, National League for Nursing, American Nurses' Association, National Association of Sanitarians, American Public Health Association, American Pharmaceutical Association, American Osteopathic Association, American Veterinary Medicine Association, American Podiatry Association, American Optometric Association, American Psychiatric Association, and American Society of Medical Technologists can provide information concerning emergency health preparedness as it affects their respective memberships.

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